

SYSTEM AND METHOD FOR ANALYZING VIBRATION SIGNALS

Abstract of the Disclosure

A system and method for analyzing vibrations signals thereby identifying
5 damage or original manufacture defects in a vibrating device. In one embodiment of the
invention, the method comprises collecting vibration signal data from at least one
vibrating device, wherein the vibrating device includes at least an rotating inner ring, a
rotating outer ring, and a plurality of rotating elements. The vibration signal data is
enveloped and converted into a frequency domain signal. The amplitude of the
10 frequency domain signal at certain defect frequencies is divided by a noise floor to
provide a damage index. If the damage index exceeds an adjustable user-defined
threshold, a warning is generated so as to alert a user of damage or original manufacture
defects in the vibrating device.

15 PATENT

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